

WHAT IS CLAIMED IS:

## 1. A security system comprising:

a first sensor disposed in an area to be monitored in a building, to monitor the area;

a moving robot having a robot main body, a second sensor for monitoring the area to be monitored and a robot operation processor for moving the robot main body according to an operation mode data indicating an operation of the robot main body;

a controller including first and second sensor information monitor means for collecting first sensor information and second sensor information which are acquired by the first and second sensors, and an operation mode data generator for generating the operation mode data from the first sensor information or the second sensor information and transmitting the operation mode data to the robot operation processor.

## 2. A security system according to claim 1, wherein the controller further includes:

a remark level data memory storing remark level data indicating the monitoring weight for the target to be monitored by the first or second sensor; and

a remark level data processor renewing the remark level data by using the first or second sensor information,

wherein the operation mode data generator generates the operation mode data on the basis of the remark level data.

## 3. A security system according to claim 2, wherein the remark level data memory stores the remark level data in form of a table.

## 4. A security system according to claim 2 further comprising an abnormality occurrence alarm which receives abnormal condition data indicating an abnormal condition in the area to be monitored and reports the

abnormal condition externally of the area, wherein the remark level data processor delivers the abnormal condition data to the abnormality occurrence alarm upon determining that the first or second sensor information satisfies an abnormal condition for admitting an abnormal condition in the area.

5. A security system according to claim 4, wherein the abnormality occurrence alarm is a host computer of a security agency, a mobile terminal device or a warning device disposed in the area to be monitored, which are capable of communicating with the remark level data processor.

6. A security system according to claim 2, wherein the remark level data processor renews the remark level data to fortify the monitoring of a place equipped with the first sensor when determining that the frequency of detection of abnormal conditions in the area to be monitored by the first sensor exceeds a predetermined value.

7. A security system according to claim 2, wherein the remark level data processor renews the remark level data to fortify the check of a room in the building when determining from the first or second sensor information that there is no person in the room.

8. A security system according to claim 2, wherein the remark level data processor renews the remark level data to fortify the check of a place to which a person to be cared has moved when determining from the first or second sensor information that the person in the area to be monitored has moved to said place.

9. A security system according to claim 8, wherein the robot operation processor inquires after the person to be cared for, and when the second sensor does not receive any response data to the inquiry to the person to be cared for, the remark level data processor informs the host computer of the security agency, the mobile

terminal device carried by a person in charge of watching over the person to be cared for, or the warning device.

10. A security system according to claim 4, wherein, when the remark level data processor determines that the first or second sensor information satisfies an alert critical condition for discriminating an alert condition lower in abnormal degree than the abnormal condition, the remark level data processor renews the remark level data to fortify the monitoring of the place equipped with the first or second sensor, and the operation mode data generator generates alert mode data for setting the moving robot in the alert mode on the basis of the remark level data.

11. A security system according to claim 10 wherein, when the remark level data processor determines that the first or second sensor information still satisfies the alert critical condition after generation of the alert mode data, the moving robot takes warning actions at the place equipped with the first or second sensor.

12. A security system according to claim 10, wherein, when the remark level data processor determines that the first or second sensor information still satisfies the alert critical condition after generation of the alert mode data, the remark level data processor transmits to the abnormality occurrence alarm an abnormal condition prognostic data indicating the presence of a prognostic sign of an abnormal condition in the area to be monitored.

13. A security system according to claim 2, wherein, in case the first sensor information monitor means does not receive the first sensor information for a predetermined duration of time, the remark level data processor renews the remark level data to fortify the monitoring of the place equipped with the first sensor.

14. A security system according to claim 2, wherein the remark level data processor changes the sensitivity of the second sensor on the basis of the remark level data.

15. A security system according to claim 2, wherein the remark level data processor changes the frequency of patrol of the area to be monitored by the moving robot on the basis of the remark level data.

16. A security system according to claim 2, wherein the remark level data processor changes the duration of time for monitoring the area to be monitored by the moving robot on the basis of the remark level data.

17. A moving robot provided in a security system, which includes a stationary sensor installed in an area to be monitored in a building, to monitor the area and a server transmitting abnormal condition data indicating an abnormal condition when the stationary sensor detects the abnormal condition, comprising:

- a robot main body movable in the area to be monitored;

- an on-board sensor mounted on the robot main body to monitor the area;

- a sensor information monitor collecting at least on-board sensor information acquired by the on-board sensor;

- an operation mode data generator generating operation mode data of the robot main body by using at least the on-board sensor information; and

- a robot operation processor activating the robot main body in accordance with the operation mode data,

- wherein the moving robot cooperates with the stationary sensor to monitor the area to be monitored.

18. A moving robot according to claim 17 further comprising:

- a remark level data memory storing remark level

data indicating the monitoring weight for at least the target to be monitored by the on-board sensor; and

a remark level data processor renewing the remark level data by using at least the on-robot sensor information,

wherein the operation mode data generator generates the operation mode data on the basis of the remark level data.